AMENDMENTS TO THE CLAIMS

1. (currently amended) A method for controlling temperatures in a semiconductor manufacturing apparatus including a reaction chamber and a plurality of heating sources, comprising the steps of:

determining a set of power ratios to be fed to the heating sources for each of ~~two or more~~ at least one selected temperatures by using plural temperature sensors; and

controlling a given temperature by performing power control on the heating sources based on at least one set of power ratios obtained in the determining step by using one or more temperature sensors, wherein the number of temperature sensors used in the determining step is greater than the number of temperature sensors used in the controlling step.

2. (currently amended) The method of claim 1, wherein ~~the~~ said at least one selected temperatures ~~are discontinuous to have a predetermined temperature interval between every two selected temperatures~~ is two or more different temperatures.

3. (currently amended) The method of claim ~~1~~ 2, wherein the power control is carried out by using power ratios for the heating sources corresponding to the given temperature, the power ratios corresponding to the given temperature being determined based on one or two sets of power ratios determined with respect to one or two sets of power ratios determined with respect to one or two selected temperature closest to the given temperature.

4. (original) The method of claim 3, wherein the power ratios corresponding to the given temperature are determined by interpolating the power ratios of the two sets based on the temperature differences between the given temperature and the two selected temperatures.

5. (original) The method of claim 1, wherein said temperature controlling step is carried out by using a P(proportional), an I(integral) and a D(derivative) operation outputs and power ratios corresponding to the given temperature, the power ratios corresponding to the given temperature being determined based on one or two sets of power ratios determined in the determining step.

6. (original) The method of claim 5, wherein a controlled power output for a heating source is determined by applying a first power ratio to the I operation output and a second power ratio to the P and the D operation outputs.

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7. (original) The method of claim 5, wherein a controlled power output for a heating source is determined by multiplying a power ratio only by the I operation output.

8. (previously amended) The method of claim 5, wherein a controlled power output for a heating source is determined by multiplying the P, the D and the I operation outputs by a power ratio during processing a wafer and is determined by multiplying the power ratio only by the I operation output when loading a wafer into the reaction chamber.

9. (original) The method of claim 1, wherein said at least one set of power ratios is selected by using a target temperature.

10. (previously amended) The method of claim 1, wherein said at least one set of power ratios is selected by using a target temperature when loading a wafer into the reaction chamber and is selected by using a measured temperature during processing a wafer.

11. (currently amended) The method of claim 1, wherein the reaction chamber includes;

a rotatable susceptor for mounting a ~~wafer~~ substrate thereon;

a ring die fixedly installed around the peripheral portion of the susceptor; and

temperature detection device, for measuring temperatures of the reaction chamber, installed near a center of the ~~wafer~~ substrate and close to a peripheral portion of the wafer.

12.-14. (canceled)

15. (currently amended) The method of claim 1, wherein the given temperature differs from ~~the~~ said at least one selected temperatures.

16. (previously added) The method of claim 1, wherein power for each of the plurality of heating sources is independently controlled.

17. (previously added) The method of claim 1, wherein the heating sources are divided into a central zone corresponding to a central region of the reaction chamber and a peripheral zone corresponding to a peripheral region of the reaction chamber and

wherein powers to heating sources in the central zone are controlled by using a measured temperature from a temperature sensor provided at the central region of the reaction chamber and powers to heating sources in the peripheral zone are controlled by using a measured temperature from a temperature sensor provided at the peripheral region of the reaction chamber.

18.-21. (canceled)

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22. (new) The method of claim 1, wherein said one or more temperature sensors are provided at either one or both of a central region and a peripheral region of the reaction chamber.

23. (new) A method for processing a substrate in a semiconductor manufacturing apparatus including a reaction chamber and a plurality of heating sources, comprising the steps of:

determining a set of power ratios to be fed to the heating sources for each of at least one selected temperature by using plural temperature sensors; and

processing the substrate by way of controlling a given temperature by performing power control on the heating sources based on at least one set of power ratios obtained in the determining step by using one or more temperature sensor, wherein the number of temperature sensors used in the determining step is greater than the number of temperature sensors used in the controlling step.

24. (new) The method of claim 23, wherein said at least one selected temperature is two or more different temperatures.

25. (new) The method of claim 23, wherein power for each of the plurality of heating sources is independently controlled.

26. (new) The method of claim 23, wherein the heating sources are divided into a central zone corresponding to a central region of the reaction chamber and a peripheral zone corresponding to a peripheral region of the reaction chamber and

wherein powers to heating sources in the central zone are controlled by using a measured temperature from a temperature sensor provided at the central region of the reaction chamber and powers to heating sources in the peripheral zone are controlled by using a measured temperature from a temperature sensor provided at the peripheral region of the reaction chamber.

27. (new) The method of claim 23, wherein said one or more temperature sensors are provided at either one or both of a central region and a peripheral region of the reaction chamber.